

Solar System*ICES*

Earth	H₂O
Mars	H₂O , CO ₂
Asteroids	H₂O is seen in some asteroids, as is ice with a C-H infrared signature
Jupiter	
Io	SO ₂ , SO ₃ , H ₂ S?, H ₂ O?
Europa	H₂O , SO ₂ , SH, CO ₂ , O ₂ , HC, XCN, H ₂ O ₂ , H ₂ SO ₄ , carbonate salt, hydrous sulfate
Ganymede	H₂O , SO ₂ , SH, CO ₂ , HC, XCN, O ₂ , O ₃ , hydrated and hydroxylated minerals
Callisto	H₂O , SO ₂ , SH, CO ₂ , HC, XCN, hydrated and hydroxylated minerals
Saturn	
Mimas	H₂O
Enceladus	H₂O
Tethys	H₂O
Dione	H₂O , C, HC, O ₃
Rhea	H₂O , HC?, O ₃
Hyperion	H₂O , CO ₂ , CN
Iapetus	H₂O , C, HC, CO ₂ , CN, H ₂ S?
Phoebe	H₂O , CO ₂ , CN, CH
Titan	H ₂ O, C ₂ (CN) ₂
Rings	H₂O , HC?
Uranus	
Miranda	H₂O , NH ₃ (NH ₃ hydrate?), hydroxylated silicates
Ariel	H₂O , CO ₂ , OH?
Umbriel	H₂O
Titania	H₂O , C, HC, OH?
Oberon	H₂O , C, HC, OH?
Neptune	
Triton	N ₂ , CH ₄ , CO, CO ₂ , H ₂ O
Pluto	
Charon	H₂O , NH ₃ (NH ₃ hydrate?)
Kuiper Belt Objects	H₂O is seen on some Kuiper Belt objects. Also identified are NH ₃ , CH ₄ , and C ₂ H ₆ .
Comets	H₂O and a variety of coma (gas-phase) molecules

NOTES: HC = hydrocarbon of unknown composition; XCN = contribution from a chemical species with a C-N triple bond; SH = contribution from a chemical species with an S-H single bond